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Irish Standard
I.S. EN 61822:2009

Electrical installations for lighting and beaconing of aerodromes - Constant current regulators (IEC 61822:2009 (EQV))

I.S. EN 61822:2009

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Údarás um Chaighdeáin Náisiúnta na hÉireann		

English version

**Electrical installations for lighting and beaconing of aerodromes -
Constant current regulators
(IEC 61822:2009)**

Installations électriques pour l'éclairage
et le balisage des aérodromes -
Régulateurs de courant constant
(CEI 61822:2009)

Elektrische Anlagen für Beleuchtung
und Befeuerung von Flugplätzen -
Konstantstromregler
(IEC 61822:2009)

This European Standard was approved by CENELEC on 2009-06-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

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Foreword

The text of document 97/135/FDIS, future edition 2 of IEC 61822, prepared by IEC TC 97, Electrical installations for lighting and beaconing of aerodromes, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61822 on 2009-06-01.

This European Standard supersedes EN 61822:2003.

EN 61822:2009 includes the following significant technical changes with respect to EN 61822:2003:

- revision and update of terms and definitions;
- addition of new subclauses, such as "Nominal output current range and tolerances";
- modification of some subclauses, such as those related to "Local control" and "Remote control";
- deletion of some subclauses, in particular "Power transformers" and "Output current indicator".

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2010-03-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2012-06-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61822:2009 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60038 (mod)	- ¹⁾	IEC standard voltages ²⁾	HD 472 S1 + corr. February A1	1989 ³⁾ 2002 1995
IEC 60439-1	1999	Low-voltage switchgear and controlgear assemblies - Part 1: Type-tested and partially type-tested assemblies	EN 60439-1	1999
IEC 60529	- ¹⁾	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 ³⁾ 1993
IEC 61000-6-2	- ¹⁾	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments	EN 61000-6-2 + corr. September	2005 ³⁾ 2005
IEC 61000-6-4	- ¹⁾	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments	EN 61000-6-4	2007 ³⁾
IEC/TS 61000-6-5	- ¹⁾	Electromagnetic compatibility (EMC) - Part 6-5: Generic standards - Immunity for power station and substation environments	-	-
IEC 61024-1	- ¹⁾	Protection of structures against lightning - Part 1: General principles	-	-
IEC 61140	- ¹⁾	Protection against electric shock - Common aspects for installation and equipment	EN 61140	2002 ³⁾
IEC 61439-1	2009	Low-voltage switchgear and controlgear assemblies - Part 1: General rules	-	-
IEC 62305-1	- ¹⁾	Protection against lightning - Part 1: General principles	EN 62305-1 + corr. November	2006 ³⁾ 2006
IEC 62305-3 (mod)	- ¹⁾	Protection against lightning - Part 3: Physical damage to structures and life hazard	EN 62305-3 + corr. September + A11	2006 ³⁾ 2008 2009
CISPR 11 (mod)	- ¹⁾	Industrial scientific and medical (ISM) radio-frequency equipment - Electromagnetic disturbance characteristics - Limits and methods of measurement	EN 55011	2007 ³⁾

¹⁾ Undated reference.

²⁾ The title of HD 472 S1 is: Nominal voltages for low-voltage public electricity supply systems.

³⁾ Valid edition at date of issue.

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
CISPR 22	- ¹⁾	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement	-	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICAL INSTALLATIONS FOR LIGHTING AND BEACONING OF AERODROMES – CONSTANT CURRENT REGULATORS

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61822 has been prepared by IEC Technical Committee 97: Electrical installations for lighting and beaconing of aerodromes.

This second edition cancels and replaces the first edition published in 2002. It is a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) revision and update of terms and definitions;
- b) addition of new paragraphs, such as "Nominal output current range and tolerances";
- c) modification of some paragraphs, such as those related to "Local control" and "Remote control";
- d) deletion of some paragraphs, in particular "Power transformers" and "Output current indicator".

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The text of this standard is based on the following documents:

FDIS	Report on voting
97/135/FDIS	97/139/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

ELECTRICAL INSTALLATIONS FOR LIGHTING AND BEACONING OF AERODROMES – CONSTANT CURRENT REGULATORS

1 Scope

This International Standard specifies the requirements for a Constant Current Regulator (CCR) having a nominal output of 6,6 A for use in an aeronautical ground lighting constant current series circuit. However, CCRs may be manufactured which have a different power rating (kVA) and current steps than those specified in this standard in order to be used on existing circuits. This standard should be applied where appropriate for these CCRs.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60038, *IEC standard voltages*

IEC 60439-1:1999, *Low-voltage switchgear and control gear assemblies – Part 1: Type-tested and partially type-tested assemblies*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 61000-6-2, *Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments*

IEC 61000-6-4, *Electromagnetic compatibility (EMC) – Part 6-4: Generic standards – Emission standard for industrial environments*

IEC/TS 61000-6-5, *Electromagnetic compatibility (EMC) – Part 6-5: Generic standards – Immunity for power station and substation environments*

IEC 61024-1, *Protection of structures against lightning – Part 1: General principles*

IEC 61140, *Protection against electric shock – Common aspects for installation and equipment*

IEC 61439-1:2009, *Low-voltage switchgear and controlgear assemblies – Part 1: General rules*

IEC 62305-1, *Protection against lightning – Part 1: General principles*

IEC 62305-3, *Protection against lightning – Part 3: Physical damage to structures and life hazard*

CISPR 11, *Industrial, scientific and medical (ISM) radio-frequency equipment – Electromagnetic disturbance characteristics – Limits and methods of measurement*

CISPR 22, *Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement*

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